

COLORADO

Department of Labor and Employment

Division of Oil and Public Safety

Mahesh Albuquerque Director

mahesh.albuquerque@state.co.us

Petroleum * Amusement Rides ▼ Outreach 2019 Home Boilers * Conveyances * Explosives * Rules * 811 Commission

OPS Regulates Retail Hydrogen Fueling

Colorado is ready for fuel cell electric vehicles and hydrogen fueling stations to make their way here!

Check our Retail Hydrogen Fueling page for more information.



HB 16 - 1053



NOTE: The governor signed this measure on 3/9/2016.



HOUSE BILL 16-1053

BY REPRESENTATIVE(S) Kraft-Tharp, Becker K., Buckner, Esgar, Fields, Garnett, Ginal, Hamner, Lee, Lontine, Melton, Mitsch Bush, Moreno, Pettersen, Rosenthal, Ryden, Salazar, Tyler, Williams, Winter, Hullinghorst;

also SENATOR(S) Hill, Crowder, Todd.

CONCERNING THE REGULATION OF RETAIL HYDROGEN FUEL SYSTEMS FOR VEHICLES.

- By January 1, 2017 promulgate rules concerning retail hydrogen fuel systems for vehicles.
- Rule must be reasonably necessary for the protection of the health, welfare, and safety of the public and persons using hydrogen fuel, and the rules must substantially conform with the generally accepted standards of safety concerning hydrogen fuel.
- Begin enforcing the rules by July 1, 2017.

Retail Hydrogen Regulations

COLORADO DEPARTMENT OF LABOR AND EMPLOYMENT

DIVISION OF OIL AND PUBLIC SAFETY RETAIL HYDROGEN FUELING REGULATIONS

7 CCR 1101-17

Effective: January 1, 2017



ARTICLE 1 GENERAL PROVISIONS

- Section 1-1 Basis and Purpose
- Section 1-2 Technical Rationale
- Section 1-3 Statutory Authority
- Section 1-4 Effective Date
- Section 1-5 Codes and Standards incorporated by reference
- Section 1-6 Definitions
- Section 1-7 Applicability
- Section 1-8 Condemning a Hydrogen Container Assembly and Piping
- System

ARTICLE 2 INSTALLATION AND REGISTRATION

- Section 2-1 General Requirements
- Section 2-2 Installation Permits
- Section 2-3 Annual Registration
- Section 2-4 Access Requirements

ARTICLE 3 DISPENSING AND FUEL QUALITY

- Section 3-1 Retail Dispensing of Hydrogen
- Section 3-2 Retail Motor Fuel Dispensers Inspection and Testing
- Section 3-3 Retail Dispensers for Hydrogen
- Section 3-4 Street Sign Prices and Advertisements
- Section 3-5 Product Quality

ARTICLE 4 DELIVERY INTO RETAIL HYDROGEN SYSTEMS

Section 4-1 Delivery

ARTICLE 5 ACCIDENT REPORTS AND INVESTIGATIONS

Section 5-1 Reportable Accidents

Section 5-2 Reporting Requirements

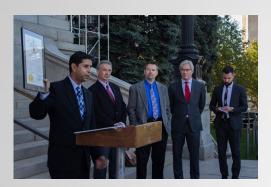
\$5K to \$20K tax credits for FCEVs

Table 1. Credit Values for Purchase, Lease, or Conversion of a Qualifying Motor Vehicle or Truck Select and enter the correct amount from this table on line 9 of the form.

Category	Type of Vehicle Fuel	Gross Vehicle Weight Rating (GVWR)	Credit Amount:		
			Vehicle Purchase	Vehicle Lease	Vehicle Conversion
1 and 1A	Electric Vehicle or Plug-in Hybrid Electric Vehicle	Light Duty Passenger Vehicle	\$5,000	\$2,500	\$5,000
7 and 7A	Electric Truck or Plug-in Hybrid Electric Truck	Less than or equal to 10,000 pounds	\$7,000	\$3,500	\$7,000
		Greater than 10,000 pounds but less than or equal to 26,000 pounds	\$10,000	\$5,000	\$10,000
		Greater than 26,000 pounds	\$20,000	\$10,000	\$20,000
4, 4A, 4B, and 4C Passenger Vehicles	Compressed Natural Gas (CNG)/Liquified Petroleum Gas (LPG) and Liquified Natural Gas (LNG)/Hydrogen	Light Duty Passenger Vehicle	\$5,000	\$2,500	\$5,000
4, 4A, 4B, and 4C Trucks	Compressed Natural Gas (CNG)/Liquified Petroleum Gas (LPG) and Liquified Natural Gas (LNG)/Hydrogen	Less than or equal to 14,000 pounds	\$7,000	\$3,500	\$7,000
		Greater than 14,000 pounds but less than or equal to 26,000 pounds	\$10,000	\$5,000	\$10,000
		Greater than 26,000 pounds	\$20,000	\$10,000	\$20,000
9	Hydraulic Hybrid	Greater than 14,000 pounds	N/A	N/A	\$5,000

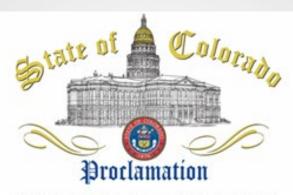
^{*} Please visit our website and review §§39-22-516.7 and 516.8, C.R.S. for complete definitions of the vehicle categories listed in the table.

Hydrogen and Fuel Cell Day









WHEREAS, hydrogen, which has an atomic mass of 1.008, is the most abundant chemical substance in the universe; and

WHEREAS, the United States of America is a world leader in the development and deployment of fuel cell and hydrogen technologies; and

WHEREAS, private industry, federal, and state governments, national laboratories, and universities continue to improve fuel cell and hydrogen technologies to address our most pressing energy, environmental, and economic issues; and

WHEREAS, fuel cell electric light duty motor vehicles and buses that utilize hydrogen can completely epilicate the experience of internal combustion vehicles including comparable range and refueling times; and

WHEREAS, engineers and safety code and standard professionals have developed consensus-based protocols for safe delivery, handling, and use of hydrogen; and

WHEREAS, the Colorado Department of Labor and Employment's Division of Oil and Public Safety has statutory authority to regulate retail hydrogen fueling pursuant to House Bill 16-1051; and

WHEREAS, the Colorado Retail Hydrogen Fueling regulations have been adopted and become effective January 1, 2017; and

WHEREAS, Colorado is now ready and open for the construction of hydrogen faeling stations and introduction of fuel cell vehicles:

Therefore, L. John W. Hickenlooper, Governor of the entire State of Colorado, do hereby proclaim, forever after, October 8, 2016, as

HYDROGEN AND FUEL CELL DAY

in the State of Colorado.



GIVEN under my hand and the Executive Seal of the State of Colorado, this eight day of October, 2016

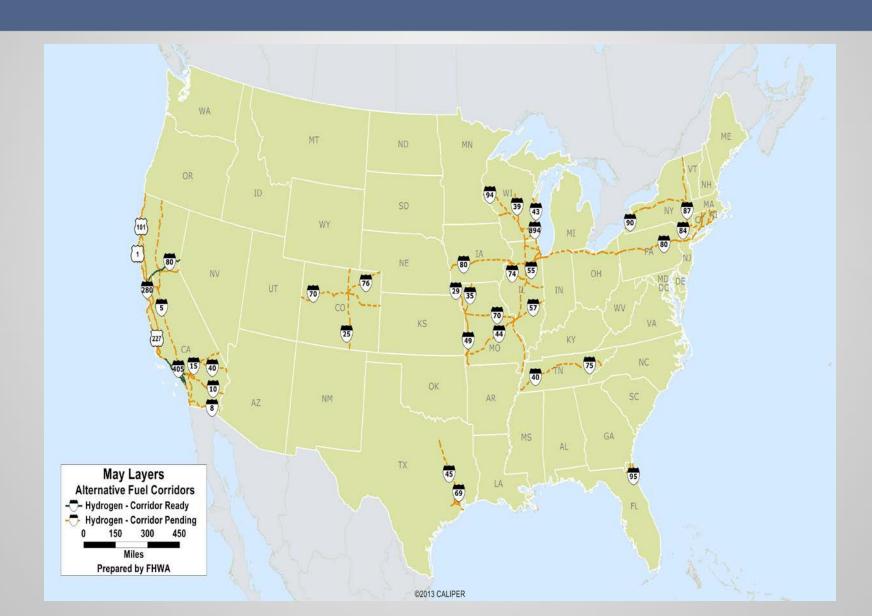
July Hitchentooper







Designated future H2 Corridors



2018 Executive Order - LEV

STATE OF COLORADO

OFFICE OF THE GOVERNOR

136 State Capitol Denver, Colorado 80203 Phone (303) 866-2471 Fax (303) 866-2003

B 2018 006



EXECUTIVE ORDER

Maintaining Progress on Clean Vehicles

Pursuant to the authority vested in me by Article IV, Section 2 of the Colorado Constitution, I, John W. Hickenlooper, Governor of the State of Colorado, hereby issue this Executive Order to ensure that the State of Colorado maintains the progress made in achieving a cleaner motor vehicle fleet.

Background, Need and Purpose

As the highest-elevation state in the country, Colorado has unmatched natural beauty and world-class recreational opportunities, but it also creates unique challenges. Our communities, farms and wilderness areas are susceptible to air pollution and a changing climate. It's critical for Coloradans' health and Colorado's future that we meet these challenges head on. The state has therefore become an innovator in adopting and implementing strategies to protect and improve our air quality. From developing advanced fuel formulation standards in the 1990's, to passage of the first voter approved renewable energy standard in 2004, to the adoption and implementation of the country's first methane regulations for the oil and gas industry in 2014. Colorado has been a clean air leader.

Executive Order D 2017 015, was issued to establish a goal for the State of Colorado to reduce statewide greenhouse gas emissions by more than 26% by 2025. We can achieve this goal by harnessing technological advancements in the clean energy field and implementing costeffective strategies that reduce our emissions while protecting our vibrant economy. We must continue our progress in reducing greenhouse gas emissions from the transportation and electric generating sectors, which are now, and will continue to be, the largest source of greenhouse gas emissions in Colorado. Over the past several years, Colorado has made tremendous gains in transitioning to cleaner forms of electricity generation while maintaining Colorado's position as one of the lowest energy cost states in the nation. That success has been bolstered by the adoption of the State's Electric Vehicle Plan at the end of January 2018, and ongoing fuel efficiency improvements for gasoline and diesel powered vehicles.



Services & information

Boards & commissions

Divisions

Concerns & emergencies

News

Air Quality Control Commission approves low emission

vehicle standards

Jeremy Neustifter, Air Pollution Control Division | 303-692-6302 | jeremy.neustifter@state.co.us

FOR IMMEDIATE RELEASE: Nov. 16, 2018

DENVER - Today the Air Quality Control Commission approved new low emission vehicle (LEV) standards for new light-duty and medium-duty motor vehicles sold in Colorado beginning in the 2022 model year. The new standards are estimated to reduce carbon dioxide emissions by nearly 2 million tons annually by 2030.

"Adopting low emission vehicles in Colorado means we will continue to see more fuel efficient vehicles that get better mileage. This has been the plan for many years," said Gov. John Hickenlooper. "I applaud the commitment of the Air Quality Control Commission and the Air Pollution Control Division to protect the quality of our air and safeguard against returning to the days of the 'brown cloud'."

The Air Pollution Control Division of the Colorado Department of Public Health and Environment proposed the adoption of the LEV standards in response to Gov. Hickenlooper's June 19 executive order, "Maintaining Progress on Clean Vehicles," which directed the department to develop a rule to establish a Colorado LEV program incorporating the requirements of the California LEV program.

2019 Executive Order - ZEV



B 2019 002

EXECUTIVE ORDER

Supporting a Transition to Zero Emission Vehicles

Pursuant to the authority vested in me by Article IV, Section 2 of the Colorado Constitution, I, Jared S. Polis, Governor of the State of Colorado, hereby issue this Executive Order supporting a transition to zero emission vehicles.

Background and Purpose

There are compelling reasons to make a large-scale transition toward zero emission vehicles (ZEVs), including electric vehicles, in Colorado, Transportation is a major contributor to air pollution and one of the two primary sources of ozone precursors, which combine under the influence of sunlight to create harmful ozone pollution, contributing to continuing violations of health-based federal pollution standards in much of the Front Range. Children and adults with asthma and other chronic health conditions like heart disease and lung disease are particularly sensitive to ozone pollution. Transportation is also now the nation's largest single source of climate-altering greenhouse gas emissions (and it is expected the same will soon be true in Colorado where the electricity sector is becoming cleaner while transportation emissions continue to rise).

In addition to the public health and climate benefits of ZEV adoption, the market and associated economic opportunity for electric vehicles is advancing at an accelerating rate. We want the future of transportation to be available to more Coloradans at a lower cost. While



Services & information Boards & commissions Divisions Concerns & emergencies

News

Zero Emission Vehicle Mandate Proposal

Back to Air Pollution Control Division outreach efforts

On June 19, 2018, Governor Hickenlooper signed Executive Order B 2018 006, Maintaining Progress on Clean Vehicles. It directs the Colorado Air Quality Control Commission (AQCC) to consider a proposed rule adopting a California Low Emission Vehicle (LEV) Standard. The AQCC passed Regulation 20 - The Colorado Low Emission Automobile Regulation (CLEAR) - on November 16, 2018.

This executive order did not direct CDPHE to propose a Zero Emission Vehicle (ZEV) program, or to mandate the sale of electric vehicles. There was extensive public comment, however, in support of both Low and Zero Emission Vehicle Rules at the AQCC meeting on August 16, 2018.

The AQCC requested that a proposed ZEV rule be presented for its consideration. If adopted, such a Proposed Rule would require an increasing percentage of all light-duty motor vehicles sold in Colorado to be Zero Emission Vehicles.

On January 17, 2019, Governor Polis signed Executive Order B 2019 002, Supporting a Transition to Zero Emission Vehicles, which includes the following directives:

- · CDPHE shall develop a rule to establish a ZEV program, and propose it to the AQCC by May 2019, for possible adoption by October 30, 2019.
- · CDPHE shall also revise its Beneficiary Mitigation Plan to allocate funds remaining from the Volkswagen settlement to the electrification of buses, trucks, and other vehicles.
- · A new Transportation Electrification Workgroup will draw representatives from CDPHE, CDOT, the Colorado Energy Office, and several other state agencies.
- · CDOT shall develop a Zero Emission Vehicle and Clean Transportation Plan to support widespread ZEV adoption.

ZEV stakeholder meeting - March

- Propose adopting CA 2018+ Model Year ZEV requirements (CA section 1962.2) and EV Charging requirements (CA section 1962.3)
- Regulation to be proposed in May, followed by public hearing and decision likely in August.
- Impact assessment study being prepared covers status and future scenarios for BEV and PHEV only. FCEVs not included because vehicles and H2 stations are not presently in market.
- CA ZEV regulation will be proposed for adoption in its entirety with all applicable FCEV options.

Opportunities

- NREL and other expertise in our backyard
- Lessons learned from ZEV states, multi-state ZEV taskforce
- Create Western-States H2 Task Force
- Update Colorado EV plan and Develop Colorado H2 roadmap
- Pilot program to launch H2 fuel stations
- Public-Private infrastructure investment
- Existing \$5,000 \$20,000 tax credit for FCEVs